

## REMARKS

### **I. Status of the Claims**

Claims 1-105 are pending in the application, and claims 1-9, 13-18, and 20-105 have been withdrawn. Thus, claims 10-12 and 19 are pending and stand rejected under 35 U.S.C. §112, first paragraph, 35 U.S.C. §112, second paragraph and 35 U.S.C. §102(a) and (e). The specific grounds for rejection, and applicants' response thereto, are set out in detail below.

### **II. Sequence Listing Compliance**

The examiner has noted that FIGS. 1A-D and FIGS. 2A-D include sequences for which identifiers are required. Applicants have amended the legends for FIGS. 1A-D and FIGS. 2A-D to include the appropriate sequence identifiers.

### **III. Rejection Under 35 U.S.C. §112, First Paragraph**

Claim 19 is rejected under the first paragraph of §112 as lacking enablement for any fusion to SEQ ID NO:2. It is the examiner's position that, other than fusions to a subcellular localization signal, the specification fails to teach one of skill in the art how to use fusion proteins. Applicants traverse.

The examiner's argument is based on the assumption that there is no other use for a calscarcin fusion *other* than to create an aberrant subcellular localization. However, it is well known in the art that fusions can be used for a variety of generic purposes. For example, fusions to leader sequences permit recombinant expression, and fusions to affinity domains permit the purification (often immunologic) of a protein of interest. See specification at page 20, lines 17 to 20 ("For example, fusions typically employ leader sequences from other species to permit the

recombinant expression of a protein in a heterologous host. Another useful fusion includes the addition of a immunologically active domain, such as an antibody epitope, to facilitate purification of the fusion protein.”). See also Example 1 for FLAG- and myc-tagging. Fusions to domains capable of multimerization (GAL4) provide even other uses, as described in Example 1. Thus, it is categorically untrue that the specification and the art are silent on other uses for fusion proteins. Since this is the premise of the rejection, applicants submit that the rejection is improper.

Reconsideration and withdrawal of the rejection is therefore respectfully requested.

#### **IV. Rejection Under 35 U.S.C. §112, Second Paragraph**

Claims 10-12 are rejected under the second paragraph of §112 for use of the term “segment.” Applicants traverse, but in the interest of advancing the prosecution, the claim has been amended as suggested by the examiner to substitute the term “molecule.” Reconsideration and withdrawal of the rejection is therefore respectfully requested.

#### **V. Rejections Under 35 U.S.C. §102**

##### ***A. Ievolella***

Claim 10 is rejected as anticipated by Ievolella under §102(a). The effective date of this reference is said to be June 6, 2000. As shown in the attached declaration under 37 C.F.R. §1.131, applicants were in possession of SEQ ID NO:2 prior to April 12, 2000. Therefore, Ievolella is not prior art against the instant application. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

***B. Ahmad***

Claim 10 is rejected as anticipated by Ahmad under §102(a). The effective date of this reference is said to be April 12, 2000. As shown in the attached declaration under 37 C.F.R. §1.131, applicants were in possession of SEQ ID NO:2 prior to April 12, 2000. Therefore, Ahmad is not prior art against the instant application. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

***C. Tang***

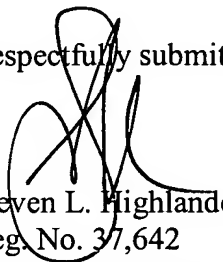
Claim 10 is rejected as anticipated by Tang under §102(e). The effective date of this reference is said to be January 21, 2000. This is incorrect. A review of the January 21, 2000 priority document, U.S. Serial No. 09/488,725, reveals that SEQ ID NO: 8629 (corresponding to SEQ ID NO:286 in U.S. Serial No. 10/098,841) was a partial sequence (see attached sequence from Accession No. AF007160). Thus, the proper effective date for Tang, with regard SEQ ID NO:2, is April 25, 2000.

As shown in the attached declaration under 37 C.F.R. §1.131, applicants were in possession of SEQ ID NO:2 prior to April 12, 2000. Therefore, Tang is not prior art against the instant application. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

**VI. Conclusion**

In light of the foregoing, applicants respectfully submit that all claims are in condition for allowance, and an early notification to that effect is earnestly solicited. Should the examiner have any questions regarding this response, a telephone call to the undersigned is invited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'S. Highlander', is written over the typed name and registration number.

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